REMARKS/ARGUMENTS

Reconsideration of this application and entry of the foregoing amendments are respectfully requested.

Claims 14 and 47 have been revised to define the invention with additional clarity.

Claims 14 and 47-49 stand rejected under 35 USC 102(b) as anticipated by Bruchman et al. The rejection is traversed.

Claim 14 is drawn to a tissue graft product from an ureter that is subjected to decellularization and nuclease treatment. The Examiner contends that column 1 of Bruchman et al, lines 19-33, under "Description of Related Art", teaches such a tissue graft. The only reference to a ureter seen in the cited portion reads:

> Attempts have also been made to replace arteries with tissues of nonvascular origin, including autologous or xenogeneic fibrous tissue tubes, bovine ureter, and grafts made from small bowel and pericardium. However, like the above grafts from vascular sources, these nonvascular biological grafts have provided only very limited success.

Nothing is seen in the foregoing that would have been suggestive of a tissue graft produced from a ureter that has been decellularized and nuclease treated, as required

by the instant claims. **These steps have obvious structural implications that are neither taught nor suggested by the cited teachings**. Accordingly, clarification of the basis for the rejection or withdrawal of same is requested.

Claims 14 and 47-49 stand rejected under 35 USC 102(b) as anticipated by Knapp et al. The rejection is traversed.

In rejecting the claims as anticipated, the Examiner refers to column 4, lines 48-56, of Knapp et al. This section makes reference to the use of submucosal tissue as a tissue graft for replacing/reconstructing damaged or diseased urothelial tissue. In column 1 of Knapp et al, it is stated that submucosal tissue can be obtained from various sources,

> including particularly intestinal tissue harvested from animals raised for meat production … .

Nothing is seen in the referenced section of Knapp et al of the presently claimed tissue graft which, as indicated above, is obtained from a ureter (not intestinal tissue) that has been decellularized and nuclease treated.

As Knapp et al does not teach a tissue graft obtained from a ureter, withdrawal of the rejection is clearly in order and same is requested.

Claims 14 and 47-49 stand rejected under 35 USC 102(e) as anticipated by Tanagho et al. The rejection is traversed.

In rejecting the claims over Tanagho et al, the Examiner directs attention to column 2, lines 16-22. This portion of the citation makes reference to an acellular matrix graft isolated from, for example, smooth muscle tissue such as ureter.

Tanagho et al refers throughout to the use of chemical and enzyme agents to "initiate" lysis and release cellular components and to "initiate" removal of cells from the matrix (see, for example, column 2, lines 33-35, column 5, line 49 to column 6, line 12, and Example 1). Tanagho teaches that such treatment results in an "intermediate matrix" that is then further treated to solubilize and remove remaining cell membranes and intracellular lipids. At the top of column 6, it is taught that typically chemical methods are used to effect this further treatment (preferably, a sodium desoxycholate solution containing sodium azide).

The complex approach used by Tanagho et al is markedly different from the simple, gentle process used to produce the graft of the present invention. Absolutely no basis is

seen for the Examiner's assertion that the product that results from Tanagho et al's multiple chemical treatments (in addition to enzyme treatment) is the same as the product that results from Applicants' process which consists essentially of effecting lysis using an osmotic effect, nuclease treating the resulting tissue matrix and then washing out debris.

Applicants have found with other tissues that, in fact, the claimed approach of effecting decellularization results in a product that is less antigenic than a product obtained using chemical poisoning, as taught by the citation. This reduction in antigenicity is clearly advantageous and is a manifestation of structural differences between the products of the two processes.

In view of the above, reconsideration is requested.

This application is submitted to be in condition for allowance and a Notice to that effect is requested.

Respectfully submitted,

NIXON & VANDERHYE, P.C.

By Mary J. Wilson
Mary J. Wilson
Reg. No. 32,955

MJW:tat

1100 North Glebe Road
8th Floor
Arlington, Virginia 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100